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October 9, 1989

Ms. Mary Sanderson
Remedial Project Manager
U.S. Environmental Protection Agency
Waste Management Division (HPL-CAN2)
JFK Federal Building
Boston, MA 02203-2211

Re: New Bedford Harbor Hot Spot
Remediation (Operable Unit
No. 1)

Dear Ms. Sanderson:

I am writing to present comments on EPA's Proposed Cleanup Plan for the Hot Spot Area of the New Bedford Harbor Site.

First, I would like to applaud EPA for taking the first concrete steps to remedy this site. For too many years this site has languished as more and more studies were conducted. The time for action is long overdue. Also, I would like to commend E.C. Jordan for the high caliber of the recently issued Feasibility Study.

I am, however, somewhat puzzled by EPA's rationale for selecting the "preferred alternative." I would like to review below the alternative selection process, as I see it. Four alternatives were considered in detail:

1. No Action
2. Incineration
3. Solidification/Disposal
4. Extraction

Clearly, the "no action" alternative does not merit serious discussion as a remedial measure. The solidification/disposal option does not result in destruction of the PCBs and therefore cannot be considered "permanent". Nor is this option cheap (\$13 million). Therefore, it should be eliminated. On that we agree.

Now we are left to choose between incineration and extraction. Both involve dredging, storage and dewatering of the sediments. Both result in nearly complete destruction of the PCBs. However, extraction offers a significant cost advantage (about \$2 million). Actually, the cost advantage is probably even greater, since:

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1. EPA's incineration costs are relatively low.
2. Costs for fixation (about \$500,000) are included in the cost estimate for extraction, even though the extraction residue is not likely to require fixation.

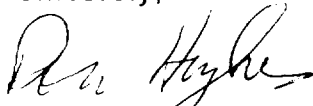
In addition to its cost advantage, I must also point out that extraction has several environmental benefits. Extraction produces a separation of organic contaminants (PCBs) and inorganic contaminants (heavy metals). In this manner, the method of treating each fraction can be fully optimized without sacrificing treatment effectiveness. Extracted oils are destroyed in a liquid incinerator, while metals reside with the solids. Leaching tests (EP Toxcity) conducted on the extracted solids indicate that the heavy metals do not leach to any great extent.

In contrast, the incineration of Hot Spot sediments will likely result in undesirable emissions, especially heavy metals. Incineration also tends to oxidize and thereby "liberate" metals in the residual ash, making them more prone to leach into the environment. Therefore, while both technologies reduce the volume, toxicity and mobility of the PCBs, the extraction process also reduces the mobility of the metals. Incineration, on the other hand, increases the mobility, and possibly the toxicity, of the metals.

E.C. Jordan, in the public meeting held on August 3, 1989, raised reliability as a potential drawback of extraction. The extraction process developed by Resources Conservation Company has been demonstrated in one full-scale application and in several pilot tests. While it has probably not received as much scrutiny as incineration, it is certainly not an unknown technology.

In light of the above, I suggest that EPA reconsider its decision to incinerate the sediments, and employ extraction instead. Keep in mind that EPA is supposed to encourage the use of innovative and alternative technologies. The New Bedford Harbor Hot Spot Operable Unit presents a perfect opportunity to do just that.

Sincerely,


Donald J. Hughes

DJH/nlg

cc: Paul Keough, Acting Regional Administrator
Frank Ciavattieri, Branch Chief

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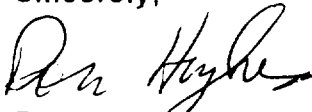
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